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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/717,060 | 11/19/2003 | Anke Muller | ST-30 | 7220 |
| 7590 | 07/01/2004 | | EXAMINER | |
| Friedrich Kueffner Suite 910 317 Madison Avenue New York, NY 10017 | | | FAISON, VERONICA F | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1755 | |

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/717,060 | MULLER ET AL. |
| | Examiner | Art Unit |
| | Veronica F. Faison | 1755  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11-19-03.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Objections

Claim 3 is objected to because of the following informalities:

In claim 3, line 3, Applicant recites "gycols" the Examiner believes that this is a misspelling and should be replaced with --glycols--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

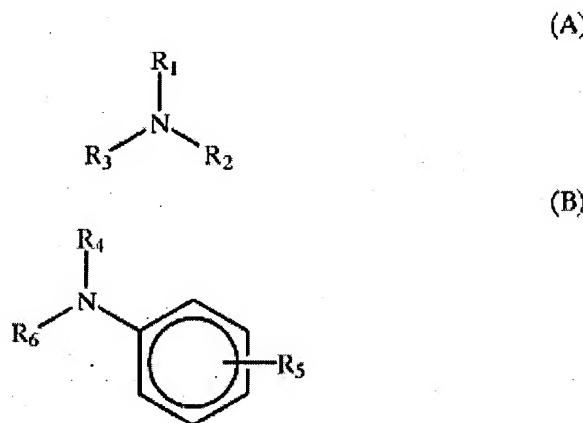
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Momose (US Patent 6,695,900).

Momose teaches an aqueous ink composition comprising a pigment, a dispersant, an organic amine compound represented by formula (A) (which correlates to the structure of claim 2) or (B) and water,



wherein R1 to R6 each independently represents a hydrogen atom or an alkyl or hydroxyalkyl chain having from 1 to 8 carbon atoms (col. 3 lines 1-4). The organic amine compound may be present in the ink composition in the amount of 0.01 to 5 percent by weight (col. 5 lines 9-11). The water is present in the amount of 30 to 90 percent by weight (col. 5 lines 26-28). The ink composition may further comprises a moisture-retentive agent such as diethylene glycol, 1,6-hexanediol and pentaerythritol, wherein the moisture-retentive agent may be used alone or in combination of two or more and present in the amount of 1 to 30 percent by weight (col. 6 lines 17-32). Additives such as fungicide (preservative) or antiseptic, viscosity-controlling agent, antioxidant (preservative), ultraviolet absorber, chelating agent and oxygen absorbent may be added to the ink composition. The dispersant in the ink composition is present in the amount of 0.01 to 5 percent by weight (col. 8 line 37-col. 9 line 8). The reference also discloses that the ink composition may be used for ink jet recording (col. 10 lines

20-24). The reference remains silent as to the ink base, however it is the position of the Examiner that since the ink composition overlap Applicant's claimed range that the ink base would also overlap Applicant's claimed range absence evidence to the contrary. Momose fails to specifically exemplify the use of diethylene glycol, 1,6-hexanediol and pentaerythritol in combination as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use diethylene glycol, 1,6-hexanediol and pentaerythritol in combination as claimed by applicant as Momose also discloses the use of diethylene glycol, 1,6-hexanediol and pentaerythritol in combination but shows no example incorporating them.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yatake (US Patent 6,454,846).

Yatake teaches an ink composition comprising at least a colorant, water and a compound represented by formula (I) (col. 2 lines 37-38). The ink composition further comprises an acetylene glycol surfactant present in the amount of not more than 5 percent by weight (col. 5 lines 5-10). The colorant may be properly selected from dyes or pigments, wherein the content of colorant is 0.5 to 30 percent by weight. A dispersant may be used to disperse the pigment in the ink composition (col. 5 line 48-col. 6 line 35). The reference remains silent as to whether the colorant is salt-free, however the reference discloses the colorants broad enough to encompass salt-free colorants. Other additives such as organic solvents, preservative, fungicide, antioxidant and oxygen absorbers may be further included in the ink composition alone or in combination (col. 7 lines 45-53). Water-soluble glycols or saccharides may be used to

prevent the ink composition from being dried at the front face of nozzles, wherein the water-soluble glycols include diethylene glycol, 1,6-hexanediol and pentaerythritol (col. 7 lines 54-63). The reference teaches that triethanolamine (which has the structure set forth in claim 2) may be present in the ink composition as a pH adjustor (col. 9 lines 12-16). The examples teach that a mixture of water-soluble glycols may be employed in the ink composition. The ink composition may be used for ink jet recording (col. 9 lines 32-36). The reference remains silent as to the ink base, however it is the position of the Examiner that since the ink composition overlap Applicant's claimed range that the ink base would also overlap Applicant's claimed range absence evidence to the contrary. Yatake fails to specifically exemplify the use of diethylene glycol, 1,6-hexanediol and pentaerythritol in combination as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use diethylene glycol, 1,6-hexanediol and pentaerythritol in combination as claimed by applicant as Yatake also discloses the use of diethylene glycol, 1,6-hexanediol and pentaerythritol in combination but shows no example incorporating them.

Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 571-

272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



XFF
June 26, 2004